

IN THE CLAIMS

The following is a complete listing of claims that replaces all previous listings of claims in this application.

1. (previously presented) A heald frame for a weaving loom, said frame including two spaced vertical struts and two spaced cross-bars each provided with a heald-carrier rod that extends along substantially a full length thereof, at least one of the struts having a projection formed therewith that extends laterally therefrom so as to be oriented in alignment with an adjacent one of the cross-bars toward the other of the spaced struts, the projection being adapted to be joined to a tubular part of an end portion of the adjacent cross-bar, at least one adjustable locking member for securing the projection to the tubular part of the end portion of the adjacent cross-bar wherein the at least one adjustable locking member when adjusted to secure the projection to the tubular part of the end portion of the adjacent cross-bar causes locking forces ( $F_3, F'_3$ ) to be directed from within an inside of the tubular part outwardly toward walls defining the tubular part, at least one hoop completely surrounding the tubular part of the end portion and the at least one locking member, and the at least one hoop cooperatively engaging an outer surface of the walls defining the tubular part of the end portion to thereby reinforce the end portion to resist

the locking effort ( $F_3$ ,  $F'_3$ ) exerted by the at least one locking member when the at least one locking member is adjusted to secure the projection to the end portion.

2. (previously presented) The heald frame according to Claim 1, wherein the projection extends within the tubular part of the end portion.

3. (previously presented) The heald frame according to Claim 1 wherein the adjacent cross-bar is provided with a slot between the tubular part of the end portion thereof and the heald-carrier rod, and the at least one hoop passing through the slot.

4. (previously presented) The heald frame according to Claim 3 wherein the slot extends substantially parallel to a longitudinal axis of the adjacent cross-bar.

5. (previously presented) The heald frame according to Claim 4 the slot opens out on a terminal face of the of the tubular part of the end portion of the adjacent cross-bar.

6. (previously presented) The heald frame according to Claim 3, wherein the slot is spaced from and does not open to a terminal

face of the tubular part of the end portion of the adjacent cross-bar.

7. (previously presented) The heald frame according to Claim 1 wherein the heald-carrier rod includes a terminal part that extends in spaced relationship along the tubular part of the end portion.

8. (previously presented) The heald frame according to Claim 1 including means for immobilizing the at least one hoop on the tubular part of the end portion.

9. (previously presented) The heald frame according to Claim 8 wherein the means for immobilizing includes at least one wedge that cooperates with a corresponding ramp provided on an outer face of the end portion of the adjacent cross-bar, and adjustment means for adjusting a relative position of the at least one wedge and the ramp to thereby tension the at least one hoop relative to the tubular part of the end portion.

10. (previously presented) The heald frame according to Claim 9 wherein the adjustment means includes a screw-nut link that displaces the at least one wedge relative to the ramp.

11. (previously presented) The heald frame according to Claim 8  
the at least one hoop is glued to the end portion.

12. (previously presented) The heald frame according to Claim 8  
wherein the at least one hoop is provided with at least one  
orifice for passage of a locking member that engages the tubular  
part of the end portion.

13. (previously presented) The heald frame according to Claim 1  
the at least one hoop is formed of bent metal sheet.

14. (previously presented) The heald frame according to Claim 1  
wherein the at least one locking member includes mechanical means  
positioned between the at least one hoop and the tubular part of  
end portion for tensioning the at least one hoop to retain the  
projection of the strut secured to the end portion of the  
adjacent cross-bar.

15. (previously presented) The heald frame according to Claim 14  
wherein the mechanical means includes at least one wedge  
interposed between the projection and the at least one hoop.

16. (previously presented) The heald frame according to Claim 15  
wherein the wedge is controlled, in a movement of translation

substantially parallel to a longitudinal axis of the adjacent cross-bar, by a screw-nut member.

17. (previously presented) The heald frame according to Claim 15 wherein the mechanical means includes two wedges provided with ramps that engage oppositely inclined faces of an opposing complementary wedge, and adjustment members for moving the two wedges and the complementary wedge relative to one another.

18. (previously presented) The heald frame according to Claim 14 wherein the projection is in one piece with a principal elongated part of the strut,

19. (previously presented) The heald frame according to Claim 14, wherein the projection of the strut includes a member for holding the mechanical means.

20. (previously presented) The heald frame according to Claim 19 wherein the member is a rod provided with an orifice for passage of a screw for tightening two wedges against ramps formed on the projection of the strut on either side of the rod.

21. (previously presented) The heald frame according to Claim 14

wherein the end portion of the adjacent cross-bar includes upper and lower oppositely inclined bearing surfaces that engage with complementary bearing surfaces of the projection of the strut.

22. (previously presented) The heald frame according to Claim 14, wherein the mechanical means includes at least one control screw offset in a direction perpendicular to a longitudinal axis of the adjacent cross-bar.

23. (previously presented) The heald frame according to Claim 3 wherein the at least one hoop includes a portion that extends beyond an end of the tubular part of the end portion in which the projection is received.

24. (previously presented) The heald frame according to Claim 1 wherein the at least one hoop is crimped while being hot around the tubular part of the end portion of the at least one cross-bar.

25. (previously presented) The heald frame according to Claim 1 wherein the tubular part of the end portion of the adjacent cross-bar is provided with at least one slot.

26. (previously presented) The heald frame according to Claim 25 wherein the tubular part of the end portion is of substantially rectangular section and the at least one slot is made in a long side of the section.

27. (previously presented) The heald frame according to Claim 1 wherein a filling material is placed between the tubular part of the end portion and the at least one hoop.

28. (previously presented) A weaving apparatus comprising, a weaving loom, the weaving loom including at least one heald frame, the heald frame including two spaced vertical struts and two spaced cross-bars each provided with a heald-carrier rod that extends along substantially a full length thereof, at least one of the struts having a projection formed therewith that extends laterally therefrom so as to be oriented in alignment with an adjacent one of the cross-bars toward the other of the spaced struts, the projection being adapted to be joined to a tubular part of an end portion of the adjacent cross-bar, at least one adjustable locking member for securing the projection to the tubular part of the end portion of the adjacent cross-bar wherein the at least one adjustable locking member when adjusted to secure the projection to the tubular part of the end portion of the adjacent cross-bar causes locking forces ( $F_3$ ,  $F'_3$ ) to be

directed from within an inside of the tubular part outwardly toward walls defining the tubular part, at least one hoop completely , at least one hoop surrounding the tubular part of the end portion and the at least one locking member, and the at least one hoop cooperatively engaging an outer surface of the walls defining the tubular part of the end portion to thereby reinforce the end portion to resist a locking effort ( $F_3$ ,  $F'_3$ ). exerted by the at least one locking member when the at least one locking member is adjusted to secure the projection to the end portion.